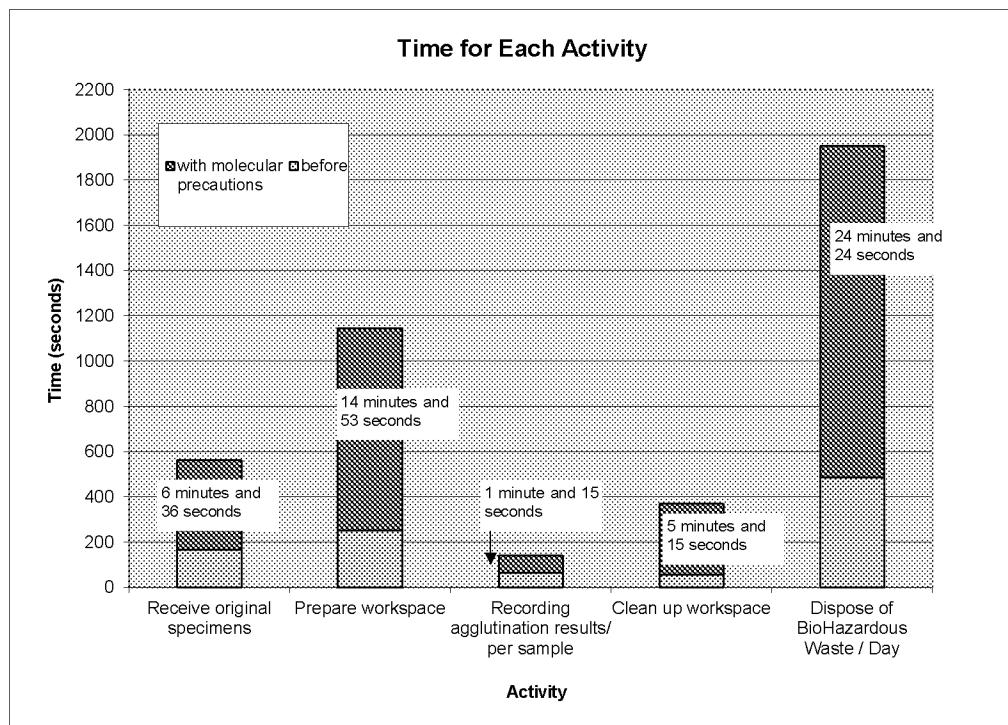


Time in the Enteric Laboratory:  
before and after incorporating molecular precautions



	before	with molecular precautions	total
Receive original specimens	167	396	530
Prepare workspace	252	893	1145
Recording agglutination results/ per sample	67	75	142
Clean up workspace	56	315	371
Dispose of BioHazardous Waste / Day	488	1465	1953

Incorporating Molecular Precautions has increased time for the following activities

1 Receiving Original Specimens	6 minutes 36 sec
2 Prepare Workspace	14 minutes 53 sec
3 Record Agglutination Results	1 minute 15 sec
4 Clean up Work space	5 minutes 15 sec

\* The items highlighted in yellow are the added steps to reduce contamination downstream

### 1. Receive Original Specimens

Wipe down bench top with vesphene or 10% bleach	31 sec
Open the outer container (cardboard)	8 sec
Take out the secondary container (metal container)	6 sec
Unfold the specimen submission paper and stamp the receiving date	38 sec
Update the outbreak paperwork (collection date sample received)	30 sec
Use tweezers to remove the cotton ball and lift the primary container high enough to check integrity of the plastic vial; if not leaking place in the metal Para-pak holder tray	15 sec
Verify the primary container has at least one identifier on the tube, and that the collection date on the tube matches the paperwork	8 sec
Wipe down the benchtop with vesphene	31 sec

Original Time: 2 minutes 47 sec

### 2. Prepare Workspace

On the Bench

**With Molecular Precautions**

Prepare benchtop: disinfect benchtop and metal tray with vespene; place down absorbent pads	3 minutes 1 second
Put on second set of gloves	37 seconds
Open the outer container (cardboard) using a bleach wipe; wipe down surface of outer container	11 seconds
Take out the secondary container (metal container) using a bleach wipe; wipe down surface of secondary container, and take off cap	12 seconds
Unfold the specimen submission paper and stamp the receiving date	38 seconds
Update the outbreak paperwork (collection date sample received)	30 seconds
Use a bleach wipe to disinfect the tweezers; Use tweezers to remove the cotton ball and lift the primary container high enough to check the integrity of the plastic vial; if not leaking place in the metal Para-pak holder tray	37 seconds
Wipe the primary container with a bleach wipe and verify the primary container has at least one identifier on the tube, and that the collection date on the tube matches the paperwork	8 seconds
Change outer pair of gloves	30 seconds
Disinfect stapler, time date stamp, tweezers	33 seconds
Discard benchtop absorbant pad and disinfect benchtop	1 minute 58 seconds

**Extra Time** 6 minutes 36sec**TOTAL Time (Orig + Extra)** 8 minutes 50 sec**In the Hood with Molecular Precautions**

Turn on the Biosafety Cabinet and let run for @ 5 minutes	5 minutes
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put on lab coat and gloves	18 sec
Wipe down counter top with Vesphene	31 sec
Use china marker to create columns (20/glass slide)	150 sec
Place all work materials on bench;open discard container	53 sec

Original Time: 4 minutes 12 sec

### 3. Recording Agglutination Results (per Sample)

#### On the Bench

Update IML with the results of all serogroups and factors you tested	43
Use a sharpie to record the serogroup results on the blood plate, TSI slant and T&T broth	24

Original Time: 1 minute 7 sec

### 4. Clean Up

#### On the Bench

Soak used glass slides in 10% bleach solution	5 sec

Place the "Restricted Access" sign on laboratory doors; lock door closest to the hood	44 seconds
Put on gloves	18 seconds
Disinfect workspace with 10% bleach followed by 70% ethanol to remove the corrosive bleach: Clean the handles of BSC, the chair back and seat, wipe down the BSC cabinet	2 minutes 31 seconds
Load a rolling cart with supplies needed in the BSC	2 minutes 17 seconds
Use china marker to create columns (6/petri dish)	150 seconds
Place all work materials into cabinet (plus bag with vespene onto orange rack)	3 minutes 53 seconds
Change gloves, and put on sleeves	35 seconds
Place hands in cabinet to begin work and allow air to settle for 1 minute	1 minute
Add a second pair of gloves on first set	17 seconds

Extra Time 14 minutes 53 sec

TOTAL Time to prepare workspace (Orig + Extra) 19 minutes 5 sec

**In the Hood with Molecular Precautions**

Record with sharpie on the blood plate; Positive and negative results of all serogroups and factors tested	10 seconds
Discard outer pair of gloves, replace with new set	37 seconds
Slowly pull out hands and transcribe all tests results from paper in the hood to a clean piece of paper	28 seconds
Transcribe results of all serogroups and factors you tested from clean paper to IML	43 seconds
Use a sharpie to record the serogroup results on the TSI slant and T&T broth	24 seconds

Extra Time 1 min 15 sec

TOTAL Time to record agglutination results (Orig + Extra) 2 minutes 22 sec

**In the Hood with Molecular Precautions**

Discard petri dish into metal pan	5 seconds
Decontaminate materials: racks with 50 vials of antisera, blood plates, markers, before taking out of the hood	59 seconds

Incorporating Molecular Precautions: Description of additional steps

Wipe down bench top and keyboard with vespene or 10% bleach	31 sec
Return antisera racks to refrigerator	20 sec

Original Time: 56 seconds \_\_\_\_\_

Incorporating Molecular Precautions: Description of additional steps

Discard biohazard bag with disposed needles, underpads and used outer gloves into the discard pan	1 minute 11 seconds
Disinfect the work surface with 10% bleach followed by 70% ethanol to remove the corrosive bleach: Clean the handles of BSC, the chair back and seat, wipe down the BSC cabinet	2 minutes 11 seconds
Bring cart full of supplies back to work bench	48 seconds
Remove the "Restricted Access" sign on laboratory doors; unlock door closest to the hood	37 seconds
Return antisera racks to refrigerator	20 sec

Extra Time 5 min 15 sec

TOTAL Time to clean up workspace (Orig + Extra) 6 minutes 11 sec